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Question Booklet Sl. No.

Question Booklet Alpha Code

A

A

Total Number of Questions : 100

Time : 90 Minutes

Maximum Marks : 100

**INSTRUCTIONS TO CANDIDATES**

1. The Question Paper will be given in the form of a Question Booklet. There will be four versions of Question Booklets with Question Booklet Alpha Code viz. **A, B, C & D**.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the Question Booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a Question Booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your Question Booklet is un-numbered, please get it replaced by new Question Booklet with same alpha code.
6. The Question Booklet will be sealed at the middle of the right margin. Candidate should not open the Question Booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the Question Booklet supplied to him/her contains all the 100 questions in serial order. The Question Booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. A blank sheet of paper is attached to the Question Booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices **(A), (B), (C)** and **(D)** having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

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1. The permissible value of turbidity for drinking water in Silica Turbidity Unit is  
A) 100 ppb                      B) 10 ppb                      C) 10 ppm                      D) 100 ppm
2. Which among the following is not an example for artificial sweetener ?  
A) Aspartame                      B) Ethyl maltol  
C) Sucralose                      D) Neotame
3. Mackereth Oxygen cell for dissolved oxygen measurement is used in  
A) Winkler's method                      B) Polarographic method  
C) Membrane electrode method                      D) Methylene blue method
4. Permanent black dyes are often produced by  
A) Para-aminodiphenyl amine sulphonic acid  
B) Para-methoxy meta-phenylene diamine  
C) Para-phenylene diamine  
D) Para-methoxy meta-phenyl amine sulphonic acid
5. Benzyl dimethyl octyl ammonium chloride is an example for  
A) Builder                      B) Cationic detergent  
C) Anionic detergent                      D) Zwitterionic detergent
6. Which among the following is most essential to be included in the recipe for making toothpaste ?  
A) Tricalcium phosphate and methyl paraben  
B) Hydrated alumina and sorbitol  
C) Insoluble sodium meta-phosphate and gum cellulose  
D) Calcium pyrophosphate and sodium dodecyl sulphate
7. Reagent commonly used to determine the hardness of water titrimetrically is  
A) Sodium thiosulphate  
B) Oxalic acid  
C) Sodium citrate  
D) Disodium salt of ethylene diamine tetra acetic acid
8. A precipitate of 0.110 g of  $\text{CaC}_2\text{O}_4 \cdot \text{H}_2\text{O}$  was obtained from 250 mL of water sample. Express the content of calcium in ppm.  
A) 250 ppm                      B) 125 ppm                      C) 120 ppm                      D) 100 ppm

9. High Density Polyethylene, Low Density Polyethylene, Polystyrene and Polypropylene can be identified by using SPI Resin Identification Codes respectively in the following order  
 A) 2, 3, 5, 7                      B) 2, 4, 6, 5                      C) 2, 5, 4, 6                      D) 2, 3, 4, 6
10. Which among the following statements are considered suitable regarding the softening of water ?  
 I. Addition of sufficient quantities of soap helps to remove all objectionable  $\text{Ca}^{2+}$  ions.  
 II. Permanent hardness of water caused due to the presence of carbonates of calcium and magnesium can be removed by boiling.  
 III. Addition of  $\text{Na}_2\text{CO}_3$  can be used as a method to remove temporary hardness.  
 IV. Addition of sodium phosphate forms complexes in which  $\text{Ca}^{2+}$  ions are trapped.  
 A) I, II and III are correct                      B) I and IV are correct  
 C) I, II, III and IV are correct                      D) I and II are correct
11. Bismuth vanadate, lithopone, mineral haematite and copper phthalocyanine pigments are used for giving following colour respectively  
 A) Yellow, White, Red, Blue                      B) Brown, Red, Blue, Green  
 C) White, Yellow, Green, Red                      D) Orange, Blue, Red, White
12. Which of the following statements regarding a lipstick are incorrect ?  
 I. A large proportion of wax is added to lipstick to make it soft and to create glow.  
 II. Lakes are produced by mixing wax with some coloured metallic salts.  
 III. Perfumes are added to cover up the unpleasant fatty odour of oil.  
 IV. Bromo acid dyes are responsible for the colour of modern lipsticks.  
 A) III and IV                      B) I and III                      C) I, II and III                      D) I and II
13. An example for carbamate pesticide  
 A) Endrin                      B) Dieldrin                      C) Carbofuran                      D) Mirex
14. Match the following with respect to BIS specifications on drinking water quality as per IS 10500-2012.
- | <b>Characteristics</b>    | <b>Limit</b> |
|---------------------------|--------------|
| 1. Chloride               | a. 75 mg/L   |
| 2. Calcium                | b. 1.0 mg/L  |
| 3. Free residual chlorine | c. 250 mg/L  |
| 4. Total dissolved solids | d. 0.2 mg/L  |
| 5. Fluoride               | e. 500 mg/L  |
- A) 1 – b, 2 – d, 3 – a, 4 – e, 5 – c                      B) 1 – d, 2 – a, 3 – c, 4 – b, 5 – e  
 C) 1 – a, 2 – b, 3 – e, 4 – c, 5 – d                      D) 1 – c, 2 – a, 3 – d, 4 – e, 5 – b

15. Maximum density of water occurs at  
A) 32°F                      B) 39.2°F                      C) 212°F                      D) 14°F
16. The maximum percentage of carbon present in urea is  
A) 46%                      B) 72%                      C) 93%                      D) 20%
17. How many of the following compounds show intramolecular hydrogen bonding ?  
Salicylic acid, ethanol, o-nitrobenzoic acid, water, 2-nitrophenol, ammonia  
A) 2                      B) 5                      C) 3                      D) 6
18. Which among the following statements regarding fertilizers are not correct ?  
I. Mixed fertilizers containing nitrogenous, phosphatic and potash fertilizers in varying proportions are known as NPK fertilizers.  
II. Urea is the best among the nitrogenous fertilizer because it leaves behind only carbon dioxide after being assimilated by plants.  
III. Calcium cyanamide mixed with nitrogen is called as nitrolim and a mixture of calcium phosphate and nitrogen is called as super phosphate of lime.  
A) Statement I                      B) Statement II  
C) Statement III                      D) Statement I, II and III
19. Chemical coagulation and filtration process involved in waste water treatment is carried out during  
A) Primary treatment                      B) Activated sludge process  
C) Secondary treatment                      D) Tertiary treatment
20. BUNA-N and BUNA-S are formed when 1, 3 butadiene combines with the following compounds in the presence of sodium respectively  
A)  $\text{CH}_2 = \text{CH} - \text{CN}$  and  $\text{CH}_2 = \text{CH} - \text{C}_6\text{H}_5$   
B)  $\text{CH}_2 = \text{CH} - \text{C}_6\text{H}_5$  and  $\text{CH}_2 = \text{CH} - \text{CN}$   
C) Hexamethylene diamine and ethylene glycol  
D) N, N Dimethyl amine and terephthalic acid
21. Name the scientist who was not involved in developing the theory of indicators.  
A) Wilhelm Ostwald                      B) Joseph Louis Gay-Lussac  
C) Robert Boyle                      D) Albert Einstein
22. If you decided to perform a weak acid/strong base titration, which of the following would you use as an indicator ?  
A) Phenolphthalein                      B) Methyl orange  
C) Bromothymol blue                      D) Methyl red

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23. Determine the number of moles of  $\text{Ag}_2\text{CrO}_4$  that will dissolve in 1.00 L of 0.010 M  $\text{K}_2\text{CrO}_4$  solution, given that  $K_{sp}$  for  $\text{Ag}_2\text{CrO}_4 = 9.0 \times 10^{-12}$ .
- A)  $9.0 \times 10^{-12}$    B)  $1.5 \times 10^{-5}$   
C)  $3 \times 10^{-10}$    D)  $3 \times 10^{-5}$
24. Most electrical mishaps are caused by
- A) Unsafe equipment and/or installation  
B) Workplaces made unsafe by the environment  
C) Unsafe work practices  
D) All of the above
25. Which category of flammable liquid does the solvent isopropanol belong to ?
- A) Class I B                                B) Class I C                                C) Class II                                D) Class I A
26. Pictograms on a GHS safety data sheet or label are
- A) Pictures of chemical hazards  
B) Graphics of hazardous chemicals  
C) Symbols that give you specific information about chemical hazards  
D) None of the above
27. Which of the following information cannot be found in MSDS ?
- A) First aid measures  
B) Medicine to be taken by the affected person if exposed to the chemical  
C) Handling and storage information  
D) None of these
28. The process of titration that takes place between  $\text{KCl}$  and  $\text{AgNO}_3$  is commonly referred to as
- A) Precipitation titration   B) Oxidation-reduction titration  
C) Acid-base titration   D) Redox titration
29. The number of gm-mole of the solute per kg of solution is known as
- A) Normality                                B) Molality                                C) Molarity                                D) Mole fraction
30. Choose a compound that is not a metallochromic indicator.
- A) Methyl orange   B) Eriochrome Black-T  
C) Calagmite   D) Xylenol orange

31. What does the strength of an acid depend upon ?
- A) Concentration of the acid
  - B) Time it takes the acid to neutralize a base
  - C) The extent to which the acid ionizes
  - D) Volume of the acid
32. According to the SHAB principle, hard acid
- A) has a low charge density
  - B) shows a preference for soft bases
  - C) prefer donor atoms with low electronegativity
  - D) not very polarizable
33. When a non-volatile solute is added to a solvent, what is the difference in vapor pressure expressed as a fraction of original vapor pressure equal to ?
- A) Mole fraction of solute in liquid phase
  - B) Mole fraction of solvent in liquid phase
  - C) Mole fraction of solvent in vapor phase
  - D) Mole fraction of solute in vapor phase
34. The molarity of ammonia in an aqueous solution is  $11.9 \text{ mol dm}^{-3}$ . Calculate the fraction of ammonia in the solution. The solution's density is  $0.92 \text{ gcm}^{-3}$ .
- A) 0.229
  - B) 0.241
  - C) 2.513
  - D) 2.293
35. Which of the following may not be a strong electrolyte ?
- A) HCl
  - B)  $\text{NH}_3$
  - C)  $\text{H}_2\text{SO}_4$
  - D)  $\text{HNO}_3$
36. Formic acid has a concentration of 0.1 M and  $K_a$  is  $1.77 \times 10^{-4}$ . What is the value of the degree of dissociation ?
- A) 4
  - B) 0.42
  - C) 42
  - D) 4.2
37. Calculate the work performed when 2 moles of hydrogen expand isothermally and reversibly at  $25^\circ\text{C}$  from 15 to 45L.
- A)  $-1438.3 \text{ cal}$
  - B)  $-1348.4 \text{ cal}$
  - C)  $-1309.7 \text{ cal}$
  - D)  $-1346.5 \text{ cal}$
38. The rate law relates the rate of a chemical reaction to
- A) The temperature
  - B) The concentrations of reactants
  - C) The activation energy
  - D) The reaction mechanism

39. According to the collision model, the atoms located at the peak of the potential energy "hill" are referred to as
- A) Top of the hill    B) Activation energy  
C) Steric factor    D) Transition state
40. The maximum efficiency of a heat engine can be achieved when
- A) Temperatures of the source and sink are maximum  
B) Temperatures of the source and sink are minimum  
C) The temperature of the source is maximum and that of the sink is minimum  
D) The temperature of the source is minimal and that of the sink is maximum
41. In pure water at 25°C, the concentration of water is
- A) 55.5 M    B) 5.55 M    C) 555 M    D) None of these
42. Ion product ( $K_w$ ) of water at 25°C is
- A)  $1 \times 10^{-11} \text{ M}^2$     B)  $1 \times 10^{-7} \text{ M}^2$     C)  $1 \times 10^{-14} \text{ M}^2$     D) None of these
43. The concentration of  $\text{H}^+$  ion in a solution is  $10^0 \text{ M}$ , then pOH of that solution is
- A) 7    B) 14    C) 13    D) 1
44. Which of the following statement(s) is/are correct ?
- i. D-Mannose is the fourth epimer of D-glucose.
  - ii. D-Galactose is the second epimer of D-glucose.
  - iii. D-Mannose and D-Galactose are diastereo isomers to each other.
  - iv. Cellulose is a homopolysaccharide of D-glucose units connected together by alpha-1, 4 glycosidic bonds.
- A) Only i and ii    B) Only iii  
C) Only iv    D) All of the above i, ii, iii and iv
45. Sphingomyelin is composed of
- A) Sphingosine and fatty acid  
B) Sphingosine, fatty acid and choline  
C) Sphingosine and choline  
D) Sphingosine, fatty acid and phosphocholine
46. Which of the following component's presence alters the fluidity of plasma membrane ?
- A) Cholesterol    B) Vitamin C    C) Water    D) Glucose



47. Which of the following sentence(s) about mitochondria is/are correct ?
- Electron transport chain components are located in the inner membrane of mitochondria.
  - Mitochondria contain specific DNA and ribosomes.
  - Mitochondria play a crucial role in triggering apoptosis.
  - Mitochondria contain enzymes of detoxification of drugs.
- A) Only i and ii                                      B) Only iii and iv  
C) Only i, ii and iii                                D) All of the above i, ii, iii and iv
48. Which of the following sentence(s) about colloidal solution is/are correct ?
- The size of the colloidal particle (solute) in the solution ranges between 200 to 300 nanometer.
  - The dispersion medium possess equal and opposite electric charges as compared to the dispersed phase.
  - Colloidal particles will not pass through a semi-permeable membrane.
- A) Only i    B) Only iii  
C) Only ii and iii                                  D) All of these
49. Which of the following is not a high-energy compound ?
- A) 1,3-bis phosphoglycerate                    B) Phosphoenol pyruvate  
C) Acetyl CoA                                        D) Glycerol-3-phosphate
50. Which one of the following is an example of emulsion ?
- A) Milk    B) Starch solution  
C) Gold sol    D) Cloud
51. Name the type of rotor in which tubes containing the samples are placed at an angle of  $30^\circ$  to the horizontal.
- A) Vertical tube rotor                                B) Fixed angle rotor  
C) Swinging bucket rotor                        D) Zero angle rotor
52. Which of the following is not used as a gradient material in density gradient centrifugation ?
- A) Ficoll    B) Sucrose                                    C) Percoll                                    D) Agarose
53. Vitamin D is detected in thin layer chromatography by
- A) iodine    B) antimony trichloride  
C) acridine orange                                D) ninhydrin

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54. Strong cation exchange resins have a \_\_\_\_\_ functional group.  
A) diethyl amino ethyl                      B) sulfonate  
C) carboxyl                                      D) carboxyl methyl
55. A safety measure to prevent radiation hazards is  
A) mouth pipetting  
B) storing radioactive samples in thick-walled lead containers  
C) improper disposal of used materials  
D) wearing cotton aprons and gloves
56. Which among the following is the least preferred carrier gas in gas chromatography ?  
A) Hydrogen                      B) Argon                      C) Helium                      D) Nitrogen
57. The half-life of radioisotope Iodine-131 is  
A) 30 days                      B) 8 days                      C) 15 days                      D) 50 days
58. Denaturing agents used in gel electrophoresis disturb the protein's  
A) primary structure                      B) secondary structure  
C) tertiary structure                      D) quaternary structure
59. The absorbance of a blue-green solution has to be measured using a colorimeter.  
The preferred wavelength range is  
A) 650 – 700 nm                      B) 400 – 420 nm  
C) 505 – 555 nm                      D) 475 – 490 nm
60. Which among the following statements is correct for the radiation source and wavelength in a UV-visible spectrophotometer ?  
A) Xenon arc lamp for wavelength from 400 – 700 nm  
B) Tungsten filament for 1000 – 2500 nm  
C) Deuterium arc lamp for 190 – 400 nm  
D) Light Emitting Diodes (LED) for 800 – 1500 nm
61. Which among the following is a non-competitive inhibitor of the enzyme pyruvate kinase ?  
A) ATP                      B) Succinyl CoA                      C) GTP                      D) Alanine
62. The principal technique not used for immobilization of enzymes is  
A) covalent bonding                      B) adsorption  
C) ionic bonding                      D) encapsulation

A

63. Which among the following factors do not affect the rate of enzyme catalyzed reaction ?
- A) Temperature  
B) Substrate concentration  
C) Enzyme size  
D) pH
64. Therapeutic enzymes have
- A) high  $K_m$  and high  $V_{max}$   
B) low  $K_m$  and low  $V_{max}$   
C) low  $K_m$  and high  $V_{max}$   
D) high  $K_m$  and low  $V_{max}$
65. Acetyl choline esterase belongs to the \_\_\_\_\_ class of enzymes.
- A) transferase  
B) hydrolase  
C) lyase  
D) ligase
66. Which among the following catalytic strategies is followed by chymotrypsin ?
- A) Covalent catalysis  
B) Metal ion catalysis  
C) General acid base catalysis  
D) Proximity effect
67. Example of a lysosomal enzyme is
- A) hexokinase  
B) cathepsin D  
C) nucleotide kinase  
D) aconitase
68. Which among the following coenzymes has the quaternary nitrogen of the thiazole ring as active/functional moiety ?
- A) Coenzyme A  
B) Pyridoxal phosphate (PLP)  
C) Thiamine Pyrophosphate (TPP)  
D) Biotin
69. ADAPT is
- A) Antigen Directed Abzyme Prodrug Therapy  
B) Antibody Directed Abzyme Prodrug Therapy  
C) Antioxidant Directed Abzyme Prodrug Therapy  
D) Adenine Directed Abzyme Prodrug Therapy
70. The slope of Lineweaver-Burk plot is equal to
- A)  $1/K_m V_{max}$   
B)  $K_m/V_{max}$   
C)  $1/K_m$   
D)  $V_{max}/K_m$
71. Which statement is correct ?
- A) Greater the numerical aperture, the greater the resolving power  
B) Greater the numerical aperture, greater the magnification  
C) The area under focus wider with increasing resolving power  
D) Magnification depend on resolving power

72. Which type of microscope is more suitable to examine hanging drop preparation of micro-organism ?
- A) Bright field microscope
  - B) Dark field microscope
  - C) Phase-contrast microscope
  - D) Electron microscope
73. Which culture method is used to isolate both aerobic and anaerobic organism from a sample ?
- A) Serial dilution
  - B) Pour plate method
  - C) Streak plate method
  - D) Spread plate method
74. Identify a semisolid media.
- A) Potato dextrose agar
  - B) Nutrient broth
  - C) Stuart's media
  - D) Corn meal agar
75. Name the selective media to isolate *Staphylococcus aureus*.
- A) Mac Conkey agar
  - B) Eosin methylene blue agar
  - C) Chocolate agar
  - D) Mannitol salt agar
76. Which statement is correct for negative staining ?
- A) Negative staining employs the use of acidic stain
  - B) Negative staining employs the use of basic stain
  - C) Methylene blue is used for negative staining
  - D) Crystal violet is used for negative staining
77. The catalyst present in the Gas Pak Anaerobic System
- A) Vanadium
  - B) Titanium
  - C) Zinc
  - D) Palladium
78. Why vegetative cells are more sensitive to heat than spores ?
- A) The cell wall is less complex than spores
  - B) Higher level of water activity of vegetative cells than spores
  - C) The vegetative cell wall contains pores
  - D) Heat sensitive proteins are present in the cell wall of vegetative cell
79. Which method of sterilization is known as cold sterilization ?
- A) Moist heat sterilization
  - B) Tyndallization
  - C) Radiation
  - D) Phenol

80. Which of the following is not a gaseous sterilizing agent ?
- A) Formaldehyde
  - B) Ethylene oxide
  - C) Beta propiolactone
  - D) Phenol
81. The protozoan pathogen causing Primary Amoebic Meningoencephalitis which is a waterborne disease is
- A) *Giardia lamblia*
  - B) *Cyclospora cayetanensis*
  - C) *Naegleria fowleri*
  - D) *Cryptosporidium parvum*
82. Sanitary Survey is the
- A) Inspection of the water system
  - B) Inspection of the sewage plant
  - C) Inspection of solid waste management system
  - D) None of the above
83. During water purification, rapid sand filters are used for
- A) To regulate pH levels
  - B) To physically trap fine particles and flocs
  - C) To eliminate dissolved gases
  - D) To facilitate chemical oxidation
84. What is the main objective of testing for the presence of coliforms during water analysis ?
- A) To indicate possible fecal contamination
  - B) To determine organic matter content
  - C) To assess pH levels
  - D) To identify heavy metal presence
85. The test procedure used to measure the amount of oxygen used by micro-organisms to oxidize the organic matter in sewage is
- A) Total Organic Carbon (TOC)
  - B) Chemical Oxygen Demand (COD)
  - C) Biochemical Oxygen Demand (BOD)
  - D) Nitrogen Oxygen Demand (NOD)
86. In constructed wetlands used for waste water treatment, which type of aquatic plants can maintain the root zone in an anaerobic state ?
- A) Floating plants
  - B) Emergent plants
  - C) Submerged plants
  - D) Aquatic flowering plants

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87. 2-chloro-6-(trichloromethyl) pyridine (nitrapyrin) is added during the BOD test of treated effluent water to inhibit
- A) Total Organic Carbon (TOC)                      B) Biochemical Oxygen Demand (BOD)  
C) Nitrogen Oxygen Demand (NOD)                D) Chemical Oxygen Demand (COD)
88. Colilert (Minimal Media ONPG-MUG Test) is a direct test for microbiological water quality analysis which can be used to
- A) Determine both total coliforms and *E. coli* within 24 hours  
B) Determine both total coliforms and *E. coli* within 48 hours  
C) Determine total coliforms only within 24 hours  
D) Determine *E. coli* only within 24 hours
89. Which of the following is not a coliform ?
- A) *Klebsiella*                      B) *Escherichia*                      C) *Serratia*                      D) *Enterobacter*
90. A major health concern in water disinfection is the formation of carcinogenic trihalomethanes, and this is associated with which method of water disinfection ?
- A) Use of Ultraviolet Radiation                      B) Boiling of Water  
C) Use of Ozone                      D) Chlorination
91. Which term describes the inability of micro-organisms to degrade xenobiotic chemical compounds ?
- A) Biodegradation    B) Recalcitrance    C) Mineralization    D) Degradation
92. The approach of biodegradation by adding easily metabolized organic matter along the compound to be degraded is known as
- A) Fragmentation                      B) Dehalogenation  
C) Cometabolism                      D) Bioremediation
93. Many filamentous cyanobacteria fix atmospheric nitrogen by means of special cells called
- A) Heterocysts                      B) Homocysts                      C) Akinets                      D) Homogonia
94. Which of the following establishes symbiotic associations with leguminous plants to fix nitrogen ?
- A) *Pseudomonas*    B) *Rhizobium*                      C) *Agrobacterium*    D) *Bacillus*

A

95. What is biogeochemical cycling ?
- A) The cycling of chemical elements and compounds involving biological and chemical processes
  - B) The degradation of organic matter to release inorganic compounds
  - C) The transformation of complex organic substrates by micro-organisms
  - D) The formation of microbial biomass from various organic polymers
96. Anammox is the
- A) Anaerobic oxidation of ammonium to gaseous nitrogen
  - B) Oxidation of ammonium to nitrite
  - C) Oxidation of ferrous ion to ferric ion
  - D) Incorporation of nitrate into microbial biomass
97. "Superbug" which have increased capability of hydrocarbon degradation was patented by
- A) Har Gobind Khorana
  - B) Anand Mohan Chakarabarty
  - C) Rajeev Kumar Varshney
  - D) Anuranjan Anand
98. Which of the following is a photosynthetic bacterium ?
- A) *Geobacter*
  - B) *Gallionella*
  - C) *Chlorobium*
  - D) *Clostridium*
99. Which among the following is not a fungal bio pesticide ?
- A) *Beauveria bassiana*
  - B) *Verticillium lecanii*
  - C) *Bacillus thuringiensis*
  - D) *Metarhizium anisopliae*
100. Which of the following is not true regarding composting ?
- A) Decomposition of organic waste matter
  - B) Bacteria, fungi and actinomycetes play major role in composting
  - C) Decomposition is done under moist and aerobic conditions
  - D) Methane is the major end product of composting
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Space for Rough Work